## OUTSTANDING GEOLOGIC FEATURE OF PENNSYLVANIA LAKE LACAWAC, WAYNE COUNTY

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## Location

94 Sanctuary Rd., Lake Ariel, Pa., Lacawac Sanctuary, Wayne Co., Paupack Twp., lat: 41.37665, lon: -75.29976 (Visitor Center parking); Lakeville 7.5-minute quadrangle



## Geology

In northeastern Pennsylvania, glacial lakes that remain to this day were formed when melting ice dumped copious amounts of sediment that blocked existing drainage networks. Lake Lacawac is a glacial lake that formed in this manner. Conservation efforts have kept the area in a natural condition. The site is a registered National Natural Landmark, a Pennsylvania Wild Plant Sanctuary, and home to the Lacawac Sanctuary.

Glaciers pushed southwestward from New York, over rolling hills, and into northeastern Pennsylvania during the late Wisconsinan, reaching their maximum extent about 20,000 years ago and then retreating to the north. During this time, a large glacial lake in the general area of today's Lake Wallenpaupack formed at the front of the ice, and smaller lakes formed at higher elevations where ice and debris blocked existing drainages. The 52-acre Lake Lacawac exists where debris from melting glaciers buried a tributary valley to Wallenpaupack Creek.



View to the east across Lake Lacawac. Photograph courtesy of Lesley Knoll, Lacawac Sanctuary.

The area east of Lake Lacawac, including the hill (see map and photograph), has more than 100 feet of glacial till—a poorly sorted mix of clay, silt, sand, cobbles, and boulders—overlying the bedrock. In the hills to the south and west of the lake, bedrock is close to the surface. The thicker till deposits in the area are thought to mark one of several ice standstills that occurred as glaciers retreated back to the north. A series of temporary, ice-impounded glacial lakes formed at the retreating edges of the glaciers as they moved across the area. Lake Lacawac persisted, however, because of the permanent blockage of till across the former drainage.

## **Recommended Reading**

Braun, D. D., 2006, Surficial geology of the Lakeville 7.5-minute quadrangle, Wayne County, Pennsylvania: Pennsylvania Geological Survey, 4th ser., <u>Open-File Report OFSM 06–12.1</u>, 15 p.

Lacawac Sanctuary website.



